

## REDUCING THE RESOLUTION OF MEDIA DATA

### ABSTRACT OF THE INVENTION

A method and system for reducing the resolution of media data. Input data at a first resolution are received from a source. The input data are compressed. The input data can be downsampled to generate compressed downsampled data at a reduced resolution. The compressed downsampled data can be used to generate a frame at the reduced resolution. When the frame is needed as a reference for another frame, the compressed downsampled data can be decoded to generate decompressed downsampled data at the reduced resolution. The decompressed downsampled data can be upsampled to generate decompressed data at a resolution corresponding to the first resolution. Thus, a larger amount of data can be processed while the data are compressed. As such, data processing operations such as transcoding can be accomplished quickly and effectively while saving computing resources.